82. (new) A process for producing jasmine lactone, which comprises the steps of:

- (i) causing cells or a culture of a microorganism having an activity to convert α -linolenic acid to 13-hydroxy-9,15-octadecadienoic acid and belonging to the genus Pediococcus or Bifidobacterium, or a treated matter thereof, to act on α -linolenic acid or a composition containing α -linolenic acid to form 13-hydroxy-9,15-octadecadienoic acid; and
- (ii) causing cells or a culture of a microorganism having an activity to beta oxidize 13-hydroxy-9,15-octadecadienoic acid and belonging to the genus *Kluyveromyces*, *Zygosaccharomyces*, *Pichia*, *Saccharomyces*, or a treated matter thereof, to act on the formed 13-hydroxy-9, 15-octadecadienoic acid to form jasmine lactone; and
 - (iii) recovering the formed jasmine lactone.

(i) is Pediococcus pentosaceus or Bifidobacterium bitfidum.

(i) is Pediococcus pentosaceus IFO3891 or Bifidobacterium bifidum JCM7002.

The process according to claim \$2, wherein the microorganism in step

(ii) is Kluyveromyces marxianus, Kluyveromyces thermotolerans, Kluyveromyces

wickerhamii, Zygosaccharomyces rouxii, Zygosaccharomyces bailli,

Zygosaccharomyces cidri, Pichia jadinii or Saccharomyces cerevisiae,